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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/021,289	10/29/2001	Jose Joaquin Garcia-Luna-Aceves	UC00-314-2US	9355

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EXAMINER

HOM, SHICK C

ART UNIT

PAPER NUMBER

2666

DATE MAILED: 06/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/021,289	Applicant(s) GARCIA-LUNA-ACEVES ET AL.	
	Examiner Shick C. Hom	Art Unit 2666	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 36 is/are allowed.
- 6) ☒ Claim(s) 1-35, 44, 46 and 47 is/are rejected.
- 7) ☒ Claim(s) 37-47 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

2. Claims 1-35 and 37-47 are objected to because of the following informalities: In claims 2-7, 9-13, 15-19, 21-24, 26-28, 30-35, and 37-47 line 1, delete "A method" and insert ---The method" because they are reciting the method recited in the corresponding independent claims. In claims 1, 8, 14, 20, 25, 29 line 4, the words "a network" seem to refer back to "a wireless communication network" recited in claims 1, 8, 14, 20, 25, 29 line 2, respectively. If this is true, it is suggested changing "a network" to ---the network---. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. Claims 44 and 46-47 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to

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particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 44 line 2 which recite "the destination hop" lacks clear antecedent basis because no destination hop have been previously recited in the claims and therefore the limitation is not clearly understood. Likewise, claim 46 lines 4-5 which recite "the process" lacks clear antecedent basis. Claim 47 is rejected under 35 U.S.C. 112, second paragraph Because it depends from rejected claim 46.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-35 are rejected under 35 U.S.C. 102(e) as being anticipated by Haartsen 96,590,928).

Regarding claims 1, 8, 14, 20, 25, 29, 30:

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Haartsen discloses a multiple-channel medium access collision-avoidance method for transmission of data packets between nodes of a wireless communication network, comprising: requiring all nodes in a network to follow a common channel-hopping sequence; wherein all nodes that are not sending or receiving data, at a given time, listen on a common channel-hop (see col. 11 lines 24 to col. 12 line 15 which recite using the same hopping channel and wake-up hop sequence whereby the wireless unit listen for a 64-chip direct-sequence code and correlating the code and activating the rest of the transceiver if the correlation result exceeds a threshold wherein the wireless unit wakes up according to the 32-hop sequence clearly anticipate following and listening on a common channel-hop when the node is not sending or receiving data). Regarding claims 2, 8, 15, 20, 25, 31:

Haartsen discloses wherein to send data, nodes engage in a receiver-initiated dialogue over the channel-hop in which they find themselves at the time they acquire data to be sent (see col. 12 line 50 to col. 13 line 8 which recite the units sharing the same channel hop in synchrony wherein if there is no data to be sent, two connected units hop in synchrony without exchanging packets however the channel is not contention-free because different channels may occasionally use the same hop clearly

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reads on sending data where nodes engage in dialogue over the channel-hop in which they find themselves at the time they acquire data to be sent).

Regarding claims 3, 9, 14, 20, 25, 32:

Haartsen discloses wherein nodes having a successful collision-avoidance handshake can remain in the same channel-hop for the duration of their data transfer, while the remaining nodes that are not subject to receiving or transmitting data continue to follow the common channel-hopping sequence (see col. 11 lines 24-47 which recite the technique for enabling units to set up and establish ad hoc connections between arbitrary wireless units whereby one unit is temporarily assigned, for the duration of the connection, the role of master whenever a connection is started for the purpose of collision avoidance).

Regarding claims 4, 10, 16, 21, 25, 29:

Haartsen discloses wherein a channel is selected from the group consisting essentially of a frequency hop, a spreading code, a combination of frequency hop and spreading code, and a hopping sequence (see col. 11 lines 24 to col. 12 line 15 which recite using the same hopping channel and wake-up hop sequence whereby the wireless unit listen for a 64-chip direct-sequence code and correlating the code and activating the rest of the transceiver if the correlation result exceeds a threshold

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wherein the wireless unit wakes up according to the 32-hop sequence and wherein the spreading code representing the recipient's address clearly anticipate the channel being selected from group of frequency hop, a spreading code, a combination of frequency hop and spreading code, and a hopping sequence).

Regarding claims 5-6, 11-12, 17-18, 22-23, 26-27, 33-34:

Haartsen discloses wherein a receiving node polls a sending node for data packets and wherein both a polling node and a polled node can transmit data after a successful Handshake (see col. 12 lines 28-49 which recite the polling scheme used for scheduling transmissions among the different slave nodes using the master node as an intermediary).

Regarding claims 7, 13, 19, 24, 28, 35:

Haartsen discloses wherein data packet collisions are eliminated without the need for carrier-sensing or code assignments (see col. 11 lines 24-47 which recite the technique for enabling units to set up and establish ad hoc connections between arbitrary wireless units whereby one unit is temporarily assigned, for the duration of the connection, the role of master whenever a connection is started for the purpose of collision avoidance clearly anticipate collisions being eliminated without the need for carrier-sensing or code assignments).

Allowable Subject Matter

6. Claim 36 is allowed.
7. Claims 37-47 would be allowable if rewritten to overcome the objection(s) set forth in this Office action.
8. Claims 44, 46-47 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
Borth et al. disclose method and apparatus for frequency hopping a signaling channel in a communication system.
Tani et al. disclose phase-locked loop controller for a frequency hopping radio.
Kanterakis et al. disclose common packet channel with firm handoff.
Mills discloses processing system with register-based processing.

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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shick C. Hom whose telephone number is 571-272-3173. The examiner can normally be reached on Monday to Friday with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SH


DANGTON
PRIMARY EXAMINER